

ABSTRACT OF THE DISCLOSURE

An optical disk 11 (sample) is laid on a sample moving unit 21 within a vacuum chamber 20. An electron beam radiating mechanism 30 radiates an electron beam to the optical disk 11 5 while moving the optical disk 11 at a constant speed. Electron detecting means 27 detects an electron from the optical disk 11. Thus, the track pitch is measured on the basis of a detected electron signal and a measured movement amount of the optical disk 11. Also, the electron beam radiating mechanism 30 is 10 provided with a fast deflector 33 for averaging within a deflection area to measure the track pitch.